

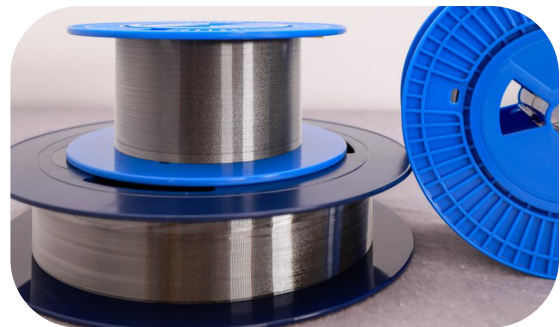
Yb-doped Double Cladding Fiber

Product Description

The 125 μm cladding diameter Yb-doped double cladding fiber is composed of an optimized fiber preparation process and high-performance glass. The fiber features high absorption coefficient, low photon darkening, and high efficiency. It can be used in low average power single frequency or pulsed laser seed sources and amplifiers, materials processing, medicine, and scientific research .

Features

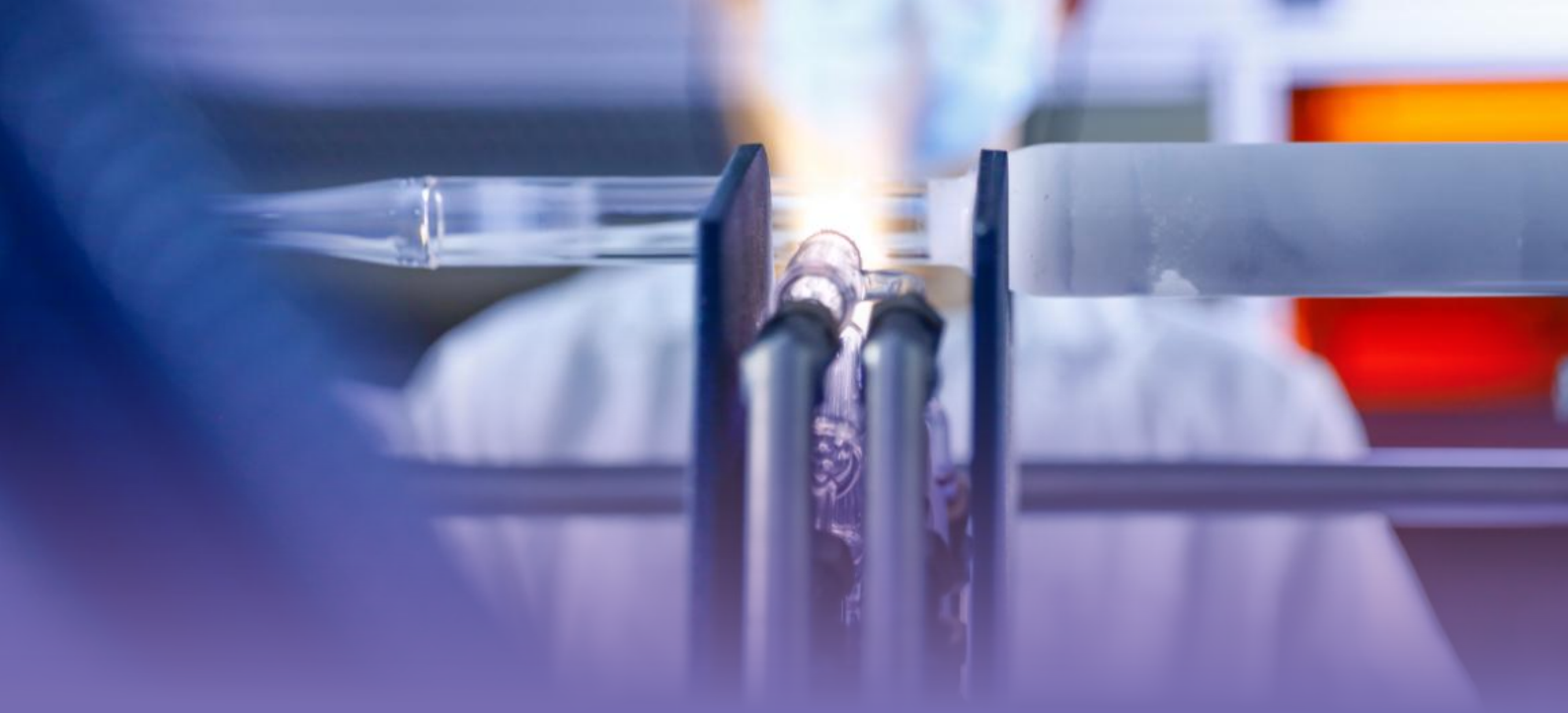
- ⦿ High absorption coefficient
- ⦿ Near single-mode transmission, low bending loss
- ⦿ High-precision geometric dimension control
- ⦿ Both PM and non PM are customized



Applications

- ⦿ Materials processing, scientific research and medicine
- ⦿ Single frequency/pulsed fiber laser
- ⦿ LiDAR





Specifications

Optical Specifications

Part Number	YDF-6/125-L-PM	YDF-6/125-H-PM	YDF-10/125-PM	YDF-20/125-PM
Operating wavelength (nm)	1015-1115	1015-1115	1015-1115	1030-1115
Core NA	0.14±0.02	0.14±0.02	0.075±0.005	0.060±0.005
Cladding NA	--	--	≥0.46	≥0.46
Core absorption (dB/m@915 nm)	80±20	200±80	--	--
Cladding absorption (dB/m@915 nm)	0.5±0.1	1.0±0.2	1.6±0.3	3.5±0.5
Core attenuation (dB/km@1200 nm)	≤15.0	≤15.0	≤15.0	≤15.0
Birefringence	≥4.0×10 ⁻⁴	≥4.0×10 ⁻⁴	≥3.0×10 ⁻⁴	≥2.0×10 ⁻⁴

Geometric and Mechanical Specifications

Core diameter (μm)	6.0±1.0	6.0±1.0	11.0±1.0	20.0±1.5
Cladding diameter (μm)	125.0±1.5	125.0±1.5	125.0±1.5	125.0±1.5
Coating diameter (μm)	245.0±10.0	245.0±10.0	245.0±10.0	245.0±10.0
Concentricity (μm)	≤1.0	≤1.0	≤1.0	≤1.0
Coating materials	Low index acrylate	Low index acrylate	Low index acrylate	Low index acrylate
Proof test level (kpsi)	≥100	≥100	≥100	≥100